

IN THE CLAIMS

Please cancel Claims 1 and 2 without prejudice or disclaimer.

Please amend the claims as shown in the marked-up copy attached to read as follows:

3. (Amended) The nonlinear resistor according to claim 8, wherein a thickness of the side-surface high resistance layer falls within a range of 1  $\mu\text{m}$  to 2 mm.

85 4. (Amended) The nonlinear resistor according to claim 8, wherein the side-surface high resistance layer is adhered to the sintered body so as to have a shock adhesive strength of 40 mm or more.

5. (Amended) The nonlinear resistor according to claim 8, wherein a material of the electrode is selected from the group consisting of aluminum, copper, zinc, nickel, gold, silver, titanium and alloys thereof.

6. (Amended) The nonlinear resistor according to claim 8, wherein an average thickness of the electrode falls within a range of 5  $\mu\text{m}$  to 500  $\mu\text{m}$ .

7. (Amended) A method of forming a nonlinear resistor according to claim 8, comprising:

forming a side-surface high resistance layer at a side-surface of a sintered body containing zinc oxide as a main component; and

forming an electrode at upper and lower surfaces of the sintered body,

wherein the electrode is formed by a method selecting from the group consisting of plasma spraying, arc spraying, high-speed gas flame spraying, screen printing, deposition, transferring, and sputtering.

Please add new Claims 8-20 as follows:

8. (New) A non-linear resistor comprising:

a sintered body comprising zinc oxide as a main component;

a side-surface high resistance layer arranged at a side-surface of said sintered body,  
and being formed of at least one substance selected from the group consisting of:

an aluminum phosphate based-inorganic adhesive which is an inorganic  
polymer,

an amorphous silica,

an amorphous alumina,

a complex of an amorphous silica with an organosilicate,

a glass containing lead as a main component,

a glass containing phosphorus as a main component,

a glass containing bismuth as a main component,

a crystalline inorganic substance containing Zn-Sb-Fe-O as a constitutional  
component,

a crystalline inorganic substance containing Fe-Mn-Bi-Si-O as a constitutional  
component,

a combination of a crystalline inorganic substance containing Zn-Si-O as a  
constitutional component with a crystalline inorganic substance containing Zn-Sb-Fe-O as a  
constitutional component,

a crystalline silica ( $\text{SiO}_2$ ),

alumina ( $\text{Al}_2\text{O}_3$ ),

mullite ( $\text{Al}_6\text{Si}_2\text{O}_{13}$ ),

cordierite ( $\text{Mg}_2\text{Al}_4\text{Si}_5\text{O}_{18}$ ),

titanium oxide ( $\text{TiO}_2$ ),

zirconium oxide ( $\text{ZrO}_2$ ),

an epoxy resin,

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a phenol resin,

a melamine resin,

a fluorocarbon resin, and

a silicone resin; and

an electrode arranged at upper and lower surfaces of the sintered body,

wherein an end-to-end distance between an end of the electrode and an end of the nonlinear resistor including the side-surface high resistance layer falls within a range of 0 mm to a thickness of the side-surface high resistance layer + 0.01 mm.

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9. (New) The non-linear resistor according to claim 8, wherein said side-surface high resistance layer is formed of a glass containing lead as a main component, or a crystalline inorganic substance containing Zn-Sb-Fe-O as a constitutional component.

10. (New) The non-linear resistor according to claim 8, wherein said side-surface high resistance layer is formed of an aluminum phosphate based inorganic adhesive which is an inorganic polymer, an amorphous silica, an amorphous alumina, or a complex of an amorphous silica with an organosilicate.

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11. (New) The non-linear resistor according to claim 8, wherein said side-surface high resistance layer is formed of a glass containing phosphorus as a main component, or a glass containing bismuth as a main component.

12. (New) The non-linear resistor according to claim 8, wherein said side-surface high resistance layer is formed of:

a crystalline inorganic substance containing Fe-Mn-Bi-Si-O as a constitutional component,

a combination of a crystalline inorganic substance containing Zn-Si-O as a constitutional component with a crystalline inorganic substance containing Zn-Sb-Fe-O as a constitutional component,

a crystalline silica ( $\text{SiO}_2$ ),

alumina ( $\text{Al}_2\text{O}_3$ ),

mullite ( $\text{Al}_6\text{Si}_2\text{O}_{13}$ ),

cordierite ( $\text{Mg}_2\text{Al}_4\text{Si}_5\text{O}_{18}$ )

titanium oxide ( $\text{TiO}_2$ ),

zirconium oxide ( $\text{ZrO}_2$ ), or

a mixture thereof.

13. (New) The non-linear resistor according to claim 8, wherein said side surface high resistance layer is formed of an epoxy resin, a phenol resin, a melamine resin, a fluorocarbon resin, a silicone resin or a silica-containing epoxy resin.

14. (New) A non-linear resistor comprising:

a sintered body comprising zinc oxide as a main component;

a side-surface high resistance layer arranged at a side-surface of the sintered body and comprising a first sub-layer and a second sub-layer provided on said first sub-layer; and

an electrode arranged at upper and lower surfaces of the sintered body,

wherein an end-to-end distance between an end of the electrode and an end of the nonlinear resistor including the side-surface high resistance layer falls within a range of 0 mm to a thickness of the side-surface high resistance layer + 0.01 mm, and

wherein said first sub-layer is formed of at least one first substance, and said second sub-layer is formed of at least one second substance different from said first substance, with said first and second substances being selected from a group consisting of:

an aluminum phosphate based inorganic adhesive which is an inorganic polymer,

an amorphous silica,

an amorphous alumina,

a complex of an amorphous silica with an organosilicate,

a glass containing lead as a main component,

a glass containing phosphorus as a main component,

a glass containing bismuth as a main component,

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a crystalline inorganic substance containing Zn-Sb-Fe-O as a constitutional component,

a crystalline inorganic substance containing Fe-Mn-Bi-Si-O as a constitutional component,

a combination of a crystalline inorganic substance containing Zn-Si-O as a constitutional component with a crystalline inorganic substance containing Zn-Sb-Fe-O as a constitutional component,

a combination of a crystalline inorganic substance containing Zn-Si-O as a constitutional component with a crystalline inorganic substance containing Zn-Sb-O as a constitutional component,

a crystalline silica ( $\text{SiO}_2$ ),

alumina ( $\text{Al}_2\text{O}_3$ ),

mullite ( $\text{Al}_6\text{Si}_2\text{O}_{13}$ ),

cordierite ( $\text{Mg}_2\text{Al}_4\text{Si}_5\text{O}_{18}$ ),


titanium oxide ( $\text{TiO}_2$ ),

zirconium oxide ( $\text{ZrO}_2$ ),

an epoxy resin,  
a phenol resin,  
a melamine resin,  
a fluorocarbon resin,  
a silicone resin, and  
a mixture thereof.

15. (New) The nonlinear resistor according to claim 14, wherein said first sub-layer is formed of:

a combination of a crystalline inorganic substance containing Zn-Sb-O as a constitutional component with a crystalline inorganic substance containing Zn-Si-O as a constitutional component,

 a combination of a crystalline inorganic substance containing Zn-Sb-Fe-O as a constitutional component with a crystalline inorganic substance containing Zn-Si-O as a constitutional component, or

a combination of an aluminum phosphate based inorganic adhesive with mullite.

16. (New) The nonlinear resistor according to claim 15, wherein said second sub-layer is formed of a glass containing lead as a main component, or a combination of amorphous silica with an organosilicate.

17. (New) The nonlinear resistor according to claim 14, wherein said side-surface high resistance layer has a thickness of 1  $\mu\text{m}$  to 2 mm.

18. (New) The nonlinear resistor according to claim 14, wherein said side-surface high resistance layer is adhered to the sintered body so as to have a shock adhesive strength of 40 mm or more.

19. (New) The nonlinear resistor according to claim 14, wherein said electrode is formed of aluminum, copper, zinc, nickel, gold, silver, titanium or an alloy thereof.

20. (New) The nonlinear resistor according to claim 14, wherein said electrode has an average thickness of 5  $\mu\text{m}$  to 500  $\mu\text{m}$ .

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